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ABSTRACT

In the first part of this presentation, a critique is made of teacher education in general, pointing out the fact that schools of education are resigned to accepting academically weak students and have a limited definition of good teaching. A narrow view of the teacher's role is also cited, as well as teacher educators' resistance to change. The second part describes the restructuring of teacher education at the University of New Hampshire at Durham. In the third part, a discussion of the structure of the five-year program includes a description of the required internship, graduate studies, and admission and academic standards for students. The fourth part presents a description of academic and nonacademic characteristics of the students in the program, as well as recruitment methods and enrollment status and projections. A national plan for restructuring teacher education is presented in the final part. (JD)

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RESTRUCTURING TEACHER EDUCATION:

THE UNIVERSITY OF NEW HAMPSHIRE'S FIVE YEAR PROGRAM

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RESTRUCTURING TEACHER EDUCATION:

THE UNIVERSITY OF NEW HAMPSHIRE'S FIVE YEAR PROGRAM

PART I - PREFACE: THE CHALLENGE FACING TEACHER EDUCATION

The challenge for Teacher Education in the 1980s is the same challenge that has always faced Teacher Education: to provide a sufficient number of good teachers for the nation's classrooms. This is not a trivial challenge. The degree to which we succeed in meeting this challenge will dictate the success of our nation's educational system.

Good teachers are at the heart of good schooling. The formal process of schooling cannot be effectively assumed by technology. Good teaching is not a set of clearly definable and relatively simple skills, transferrable from one learning situation to another. Good teaching cannot be programmed into a robot. Good teaching cannot simply emerge from any warm body we happen to find for the classroom.

To produce better teachers is to proportionately produce better education. Of course, teacher educators are not solely responsible for this challenge. We are very familiar with the need to improve the financial rewards for teachers, the working conditions, career opportunities and the image and status of teaching. We should all work toward these crucial improvements. We must not use them as an excuse to do nothing about teacher education. There is much that teacher educators can do to produce more good teachers.

Several factors recently have helped us to see the challenge more clearly. First, there has been a heightened public dissatisfaction with educational institutions. Second, there has been a dramatic decrease in numbers of young people choosing to pursue a career in teaching. Third, there has been a significant decline in the academic ability of those young people who are choosing to teach. Unfortunately, the more academically able are leaving the teaching talent pool.

The search for solutions, spurred by a myriad of national reports on education, has focused attention on the preparation of teachers as one possible cause for the perceived inadequacy of schools. Teacher educators are once again embarrassed by the all-too-familiar criticism and are obliged to look more closely at their programs. Perhaps this time the pressures for change will persist until significant restructuring of teacher education is achieved; perhaps not. We are adept at sandbagging. We form tediously slow committees to study the issues until our senses are dulled into forgetting or gladly forfeiting our charge. We put in place new standards which give the appearance of progress, or develop exit tests that appear to prove competency. We develop new sounding versions of old methods, or proclaim significant new additions to our "knowledge base" to convince each other that change is occurring.

The basic problems of teacher education are not new. They are the same ones addressed in the late 1960s in restructuring our program at the University of New Hampshire. The underlying weaknesses are so basic, in fact, that it is painful to make them explicit. Yet we must

start here. Simply put, the basic weaknesses involve acceptance of a second rate talent pool, the related focus on a limited definition of good teaching; a narrow view of the teacher's role, and the dogged protectionism of teacher preparation practices in the face of persistent and consistent criticism.

Accepting A Second Rate Talent Pool

We as teacher educators seemingly accept that few academically able students will go into teaching. In so doing, we accept the second rate status of teachers in our society and perpetuate our own second rate status in the academic world. We have a self-image problem. To improve this image we must believe that teaching deserves a better than average slice of our national talent pool and thereby decisively act to get our fair share of that talent. To do this we must actively recruit good students from our high schools and from our college populations. We must also have programs and standards that attract the better students.

The problem of the status for teacher education does not only exist in each institution that prepares teachers, it exists in those that don't. Indeed, the diminished image of teachers and teacher education is most extreme in those elite institutions with the top of the college talent pool that prepare no teachers at all. If we look at the distribution of talent throughout our institutions of higher education and compare that with the distribution of teachers being prepared, we are made painfully aware of the imbalance, and the obvious fact that the problem is not how many institutions prepare teachers but rather

which ones prepare how many. In point of fact, those institutions drawing the best of the college talent pool and preparing few or no teachers are shirking their social responsibility. While they could contribute substantially to the solution of the teacher quality issue, they are instead contributing to the problem.

Some teacher educators have recently expressed alarm that the number of colleges and universities preparing teachers increased during the 1970s while total enrollments in teacher education declined. This is not necessarily an undesirable situation. We must convince those institutions with a select talent pool that offering opportunities to prepare to teach in our nation's schools is not beneath them. Many of our "best and brightest" young people who attend these institutions have a strong desire to make a social contribution. We must promote teaching as a viable and rewarding option for these people.

We must accept as our challenge the improvement of the talent pool for teacher education. The emphasis should be on getting more good people in--not on keeping a few weak candidates out.

Limited Definition of Good Teaching

Teacher educators have focused their research and their practice on too narrow a vision of what a good teacher is. We have concentrated on the contributory conditions for good teaching while neglecting the necessary conditions. While we know there are a variety of effective teaching styles and effective teachers, we also know that there are some basic qualities or conditions of good teaching common to most good teachers. These basic qualities, the necessary conditions of good

teaching, have received too little attention in our discussions of teacher education. This may be because we do not believe that there is sufficient agreement as to these basic and necessary conditions. Our neglect may reflect a belief that these qualities are beyond our influence as teacher educators. In either case, we have largely ignored the basic and necessary conditions of good teaching.

We have focused most of our scholarship and our practice on achieving a scientific definition of teaching competencies and on seeking out correlations between specific teaching practices and student performance. While these efforts have been helpful in slowly building a scientific knowledge base regarding teaching, they have restricted our focus to those aspects which define and explain only a small part of good teaching. This narrowness is partly due to our academic interest in pedagogy, our fascination with technique, the predominance of behavioral psychology in education and our quest for scientific credibility. In the search for specificity, we have forgotten the forest while seeking identity of the trees.

To regain our perspective so as to identify the necessary conditions of good teaching, let's recognize the issue from the point of view of parents and citizens. What do they want from a good teacher? Recent national discussions have clarified this. Above all, parents and citizens want our teachers to effectively teach basic academic skills. Obviously good teachers must then have good academic skills themselves. We can expect that most good teachers will have been good students themselves.

Parents and citizens want our teachers to teach the essentials of their fields, not clutter the minds of our children with the trivial. Good teachers need to know what they are teaching. The wider and deeper their knowledge, the better. Simple, clear explanations come from the richest and clearest knowledge of principles. The ability to provide the right illustrations to motivate and illuminate understanding comes from a breadth of knowledge providing the teacher with many examples. Obviously, good teachers must know their field well. Again, we can expect that most good teachers will have been good students themselves.

Finally, parents and citizens seem to want our teachers to teach children to think critically and creatively, analytically and intuitively. The ability to teach these higher level processes of disciplined thinking comes from knowing those processes and demonstrating them. We can expect that good teachers will have experienced these processes in their own education. We can expect that most good teachers will have been good students themselves.

These desired abilities require that we find our teachers in the upper half of the national college population. "Good" is defined in relation to the whole. We cannot continue to draw teachers from the bottom half of our college population and still meet the challenge of producing enough good teachers for the nation's classroom.

To further identify necessary conditions of good teaching, we can look to the client population, the students themselves. What do students want from a good teacher? The evidence from studies of students' perceptions is remarkably persistent.

They want teachers who communicate effectively, who can recognize the level of the students' understanding and can explain things well. They desire good teachers who know their field intimately.

They want teachers who have a persistent, positive attitude toward children and learning. From this attitude comes qualities students universally recognize in good teachers: enthusiasm for learning, liking students, and patience. As classroom observers, we see these positive attitudes of our good teachers emerge in creating an unmistakable ambience in the classroom, a feeling tone of mutual interpersonal respect mixed with a respect for the learning process.

In addition to the above, let us look at the most basic things we as professionals know about good teachers. What is it that allows us to recognize a good teacher in the classroom or even a potentially good teacher in that first classroom encounter of a "pre-professional teaching experience"? Above all, it is judgment. We can define this as ability to perceive all that is relevant and irrelevant in the chaos of the classroom and to make effective decisions about human interaction, discipline, content and teaching methods; decisions which often vary for each student. Elliot Eisner describes well the interactive judgment of the teacher.[1]

> The teacher reads the qualitative cues of the situation as it unfolds and thinks on her feet, in many cases like a stand-up comedian. Reflection is not absent, theory is not irrelevant, even research conclusions might be considered, but they provide guidance, not direction. They are more in the background than in the forefront.

Certainly teachers continually improve their classroom judgment through experience. Yet this ability to make decisions in the classroom seems quite evident when we first observe college students in an exploratory field experience.

Good academic skills, breadth and depth of knowledge, ability to communicate well, a positive attitude toward children and learning, and good judgment are necessary conditions of good teaching. While we may assist in the development and appropriate use of these qualities in the context of teaching, they are qualities that are generally evident in prospective teachers independent of our role as teacher educators. Therefore, a significant part of the challenge to teacher educators (Providing Good Teachers for the Nation's Classroom) is met by finding the right people for our programs.

Our first course of action is recruitment. We must concentrate on three things: (1) making our program attractive to the people we seek (an indirect form of recruitment); (2) setting admissions standards and procedures that effectively cause self-selection of the kind of people we want; and (3) recruiting outstanding students. We will discuss these three requirements later in the context of the Five Year Program at the University of New Hampshire.

Narrow View of Teachers' Role

While narrowness in our definition of good teaching has caused us to overlook certain basic and necessary characteristics of good teachers, it has also caused us to narrowly define the teacher's role in the entire educational enterprise. This may be a reflection of our acceptance

of a less than adequate talent pool and a deep seated lack of faith in teacher competence. If so, these attitudes can no longer be tolerated. Acquiescence to a limited view of teacher competency has caused us to prepare teachers only as classroom managers who facilitate the transfer of curriculum to students. We have not considered the role of teachers as educational decision-makers.

Good teachers are in the best position to make essential educational decisions about curriculum and even about budget and staff. We know from recent studies of teacher dissatisfaction that the lack of power and responsibility for teachers in educational decision making is a critical factor. Yet we have seen little attention paid to developing or recognizing leadership and decision-making skills in our preservice teacher education programs.

Teacher leadership appears as one of the central objectives in the development of the Five Year Program at the University of New Hampshire. Indeed, the major description of the philosophy and substance of the University of New Hampshire's program, published in 1974 was titled Teacher Leadership: A Model for Change.[2] This monograph developed the concept that good teachers must have a major role in educational decision making. Specifically, teachers should be expected to play a major role in the preservice instruction of teachers, to assist with continued growth of inservice teachers, and to take the initiative in curruculum change.

Of course, beginning teachers should first attend to mastering the art and craft of teaching, but the essential tools and attitudes for

educational decision-making provide a basis for both an effective teaching style and a leadership role in the schools. Until we believe in teacher competence, and therefore prepare teachers for leadership roles and give teachers more power and responsibility in the schools, we will not be very successful in recruiting or retaining the "best and brightest."

Teacher Educators' Resistance to Change

While accepting a diminished talent pool and supporting too narrow a definition of good teaching and the teacher's role have hindered the restructuring of teacher education, so has another major weakness. This weakness is the teacher educator's resistance to change. Teacher educators have long ignored the following persistent criticisms from students, the public and a few colleagues, that:

(1) the large number of required education courses in the undergraduate years take students away from gaining depth in the academic disciplines and a strong general education.

(2) too many education courses appear to be irrelevant and/or trivial.

(3) the best way to learn about teaching is from actual classroom experience joined with examination of that experience with the help of skilled analysts and practitioners. There is too little of this experience in teacher education programs.

(4) Teacher educators and teacher education programs remain too aloof from schools. There needs to be more of a partnership providing better programs, greater acceptance of the programs and their products, i.e, the beginning teachers.

It was with these criticisms in mind and with a broad definition of good teaching emphasizing judgment and leadership that we undertook to restructure teacher education at the University of New Hampshire. The following discussion will review our program development, program structure and results.

PART II - RESTRUCTURING TEACHER EDUCATION AT THE UNIVERSITY OF NEW HAMPSHIRE: THE PROCESS

The Process of Change at the University of New Hampshire

In 1969 a general model for teacher development was discussed by the Department of Education of the University of New Hampshire. Among its major emphases, the model called for the elimination of education majors (for elementary teachers), an integration of undergraduate and graduate study, a full year internship, a total revision of educational foundations courses, and a sharing of power with other agencies in the planning and operation of teacher education.

Numerous meetings with faculty, senior students and school personnel led to approval of the general teacher education model in Janaury of 1971, and agreement that further planning should be undertaken by a cooperative agency representing groups most directly involved with public school education in the state. Utilizing small grants from the New England Program in Teacher Education and from Title III, a Cooperative Planning Committee convened on July 7, 1971, to continue the planning process.

The planning committee modified and approved the general model for preservice-inservice staff development. It initiated eight task forces made up of students in teacher education programs and representatives of all participating agencies. These task forces planned the details of a new approach for preservice and inservice teacher education. Planning was completed in April of 1972. Over 100 people representing a variety of agencies were included in the planning process.

Following completion of the planning phase, the Central Planning Committee and Task Forces were dissolved and replaced by an Advisory Board. Its immediate focus would be on implementing certain phases of inservice training as developed in the plan. The preservice portion of the program would require acceptance and implementation by college and university educators. The plan (in the form of a 70-page document) was then presented to the UNH Department of Education in May of 1972.[3]

It took nearly a year to win approval of all necessary university groups. Actual program implementation began in June 1973.

The Conditions Supporting Change, 1969-1973

Five factors appear to have been particularly relevant in supporting a major program change at the University of New Hampshire.

First, there was an initial model for a revised teacher education program, developed by the author, which took into account long-standing and well known criticisms of teacher education. The basic model was acceptable to university administrators, most university faculty, and representatives from the public schools. The model provided a starting

point upon which a variety of people involved in the preparation of teachers could agree.

Second, the teacher education program at the University of New Hampshire was situated in a Department of Education in a College of Liberal Arts where it was equitably funded. Many teacher education activities were shared with "academic" departments. The Department of Education enjoyed reasonably good status in the college. Most academic departments strongly favored a move to a five year program because it allowed more undergraduate time for general education and depth in the major. Dissenting departments were those with a number of their own courses devoted to teacher education at the undergraduate level (i.e., math education, music education, and physical education). These departments feared a loss of students.

Third, the university administration was willing to put more resources (or the same resources for fewer students) into a teacher education program they believed would produce better teachers.

Fourth, there was an increasing enrollment in the teacher education program and the beginning of oversupply was evident in many fields. Faculty were feeling the pressure of too many students; and the job prospects for graduates were declining. A deliberate decrease in enrollment therefore seemed appropriate.

Fifth, the Department of Education was made up of several graduate programs in addition to teacher education. Those programs were enjoying growth and abundant federal funding. Most of the teacher education faculty also taught in these graduate programs and the prospect of a

serious drop in teacher education enrollment as a possible result of the five year program was not terribly threatening.

The Change Process in Retrospect

After almost 15 years, certain stengths and weaknesses of the change process are still evident.

A key factor was a well thought out plan to present as a starting point. Without it, support from administration and the synthesis of ideas from many diverse groups would have been much slower and perhaps impossible. Much time was saved by having dealt with the familiar criticisms of teacher education beforehand (length of student teaching, clinical experience only at the end of the program, too little room in undergraduate years for general education, inadequate preparation in teaching subject fields, poor professional courses, etc.). When early discussions turned to these areas, many aired their pet peeves, agencies began blaming each other for problems, and productive planning was slowed. The ability to point to a plan which responded to traditional problems allowed the participants to put aside their complaints and to continue positive planning.

Much time was also saved by identifying crucial areas of professional knowledge to be taught under a flexible format allowing a variety of topics. This reduced the threat to education professors, who had less cause to fight for the ascendancy of their own particular areas of interest.

The involvement of persons who would be key to successful approval, implementation and operation of the program was essential. For the most part, this was done. Although omissions in one area may have created a later problem. Faculty from several departments with a major investment in specialized four year teacher preparation were left out of the planning process. Specifically, these were faculty from music, mathematics, and physical education. These departments had been opposed to the Five Year Program from the beginning. They were left out of much of the planning process, and programs in music and physical education eventually were left out of the new plan. Students from these departments could elect the five year program but were not required to do so.

Similar exceptions were made in home economics and occupational education, but many students from these programs were encouraged to pursue the Five Year option. Music students were actively discouraged by their own music faculty from doing so. Perhaps a more active involvement of faculty from the most resistant departments could have produced more program support. Perhaps not.

Of course, the most important element in the change process was commitment: a sincere desire existed on the part of many people to achieve an improved teacher education program. This provided the persistance and enthusiasm necessary to see a participatory process of change through for a period of about five years.

Conditions Supporting Change at the National Level - 1984

Since 1969, when our planning process at UNH began, the essential challenge to teacher education--to prepare enough good teachers for national classrooms--has not changed. However, in several ways, factors supporting change are less advantageous now than in 1969. (1) The numbers of students wishing to enter teaching is down. (2) The supply of new teachers as a percentage of demand for new teachers is down considerably. (3) The federal money directly available to institutions of higher education is less than it was in 1969. (4) In 1969 many colleges of education and departments of education were in an expansion phase of adding staff and programs. Today, although a surprising number of new teacher education programs have appeared in the past six years, many programs in education have been cutting out programs, eliminating staff and experiencing a steady decline in enrollment.

These conditions seem to demand a response, yet they create a situation which could be far more resistant to change than was the case in 1969. One of the essential reasons for resistance is the threat to jobs in teacher education. The threat is easy to understand. If we raise standards and select only students from the top half of our college population and if we extend programs--making them more expensive for students and for institutions--we may see a drastic decline in numbers of prospective new teachers.

After discussing the structure of the Five Year Teacher Education Program at the University of New Hampshire and its results to date, we will return to this issue of a national movement toward extended teacher education programs and its implications.

PART III - STRUCTURE OF THE FIVE YEAR PROGRAM

Basic Assumptions

In 1984 the Five Year Program at the University of New Hampshire has essentially the same structure outlined at the end of the planning process in 1972. In generating this structure, the planning group agreed to certain basic assumptions. Six of those assumptions were that:[4]

(1) A strong general education combined with and depth in one's major field are prerequisite to good teaching.

(2) The most effective way of learning about teaching is by integrating theory with practice. More clinical experiences and greater use of practicing teachers in teacher education are seen as appropriate strategies.

(3) Clinical experiences should provide a gradual introduction to full teaching responsibilities and should be available throughout the professional preparation program, not just at the end.

(4) Certain general areas of professional training are important to all who teach. Many of the traditional divisions in teacher education are in large measure unwarranted and represent great duplication of effort.

(5) Because of the many effective teaching styles and justifiable philosophies of education in which teaching styles are based, teacher development programs should provide a broad perspective of alternatives in education, fostering autonomy in choice of philosophy and development of personal teaching styles.

(6) Learning about teaching should be a continual process, extending through a teacher's career. Teacher educators, school administrators and certifying agencies should view this extended period as probably much more important than preservice training and should devote proportionately more time to it.

The group then developed a program which emerged as a five year, integrated undergraduate-graduate course of study. It emphasizes a strong general education and depth in a major field. Students in the five year program complete a bachelor's degree at the end of their fourth year. There are no undergraduate majors in education.

Phase One: Exploring Teaching

During the student's undergraduate work, the initial phase of the teacher preparation program begins with early experience in the schools, where students work as aides or teaching assistants (Exploring Teaching). Generally, students take this course as sophomores. This initial phase provides students with an opportunity to explore various kinds of teaching tasks, participating in at least 65 hours of instructional activities with experienced teachers in the schools. The students also attend a weekly seminar which helps them make more realistic decisions about teaching as a career.

The field work emphasis is on participation rather than observation. Students are encouraged to take on teaching tasks immediately. Seminars, which are limited to enrollments of 15 students and taught by full-time faculty, focus on topics such as the authority and modeling roles of teachers, community expectations placed on teachers, living on a

teacher's salary, and the classroom teacher's role in helping children with special needs. Classroom teachers, school administrators, and other school personnel provide important input in field-based seminars. Student performance in Phase One weighs heavily in later selection procedures.

Phase Two: Professional Coursework

The second phase of the program normally begins in the junior year and requires a minimum of four credits to be completed in each of four areas of study: Educational Structure and Change, Human Development and Learning, Alternative Teaching Models, and Alternative Perspectives on the Nature of Education. (A detailed rationale for the four major areas of preservice professional courses is developed in Teacher Leadership: A Model for Change.[5] A variety of minicourses, some including experiences in local schools, are available in these required areas.

Working with their advisors, students develop highly individualized programs. Credits in these four areas may be taken at either the undergraduate or graduate level. This allows students to have greater flexibility in fulfilling the requirements of their major departments.

Candidates for elementary teaching must complete two additional courses in mathematics and a clinically oriented course in fundamentals of reading instruction. These may also be taken at the undergraduate or graduate level.

Offering Individual Choice within Content Areas

Allowing a wide range of student choice in professional courses causes some concern that students will miss certain essential content. The justification for individual programming rests on four assumptions.

First, students preparing to teach have different perceived needs and interests at different stages of development. Giving choices within important areas increases the chance that students will see their education coursework as relevant.

Second, one cannot expect preservice teachers to have dealt with everything they will need to know to be competent professionals. There are many areas of knowledge pertinent to becoming a good teacher. There is not time to "do it all" nor is there agreement on which knowledge is most critical. Much of the specialized preparation of teachers should be expected to take place during internship and in later years as "inservice" learning.

There is a tendency to expect beginning teachers to have every bit of specialized preparation that is peculiar to each specific job environment or that is a favorite of a particular administrator, education official or professor. This unreasonable demand on preservice preparation is central to the dilemma facing teacher education today; the inability to balance strong academic preparation, subject field depth and general education with adequate initial professional preparation.

We cannot do it all. Even in a five year framework which usually includes two summers of course work beyond five academic years, we are

increasingly constrained by a continuing proliferation of specific professional requirements forced on us by national and state agencies. We are also continually faced with professors who want the number of credits of their courses to increase or their course to be required.

Third, in-depth study of a limited topic is often the best way to teach general skills, attitudes and concepts. Most of our options within the four professional areas are in-depth study of particular topics instead of broad, introductory "coverage" courses. In general, we believe this approach to education is more effective in three ways: gains student involvement; provides substantive, in-depth learning; and thereby teaches the general skills and attitudes we feel are of primary importance. For example, students electing a two credit course in Alternative Perspectives on the Nature of Education entitled "Controversial Issues in Education" select current educational issues of concern to them, such as the exclusion of sex education in a local school, creationism and evolution in the curriculum, or school prayer. Students are required to do extensive library research on their topics (in groups) and to prepare arguments on all major points of view on the issue while being certain that the interests of all relevant parties are considered. The professor oversees and critiques the process and provides instruction on how to construct and assess arguments for various positions. Care is taken that students make connections between social and legal contexts and the educational issue at hand. Surely there are many other important controversial educational issues emerging today. Surely there will be many new ones in the future. Our concern is not

which specific content students cover but rather that they learn the skills and attitudes of thorough analysis, investigation of all relevant points of view, and synthesis of a well formed, personal position on educational issues.

Fourth, the use of a variety of subject matter options under each professional area allows the best use of faculty interests and strengths. Most teacher education faculty are able to identify subtopics within the four general professional areas which represent their current research interests and scholarly background. This keeps faculty enthusiasm for teaching in these basic areas high and helps to provide better teaching. It is also clear that this model produces a strong correlation between official course descriptions and actual course content. This situation seldom applies with broad survey courses.

The success of the multi-option approach to professional course work is perhaps reflected in the consistently high student evaluations of these courses. A study in 1982-83 revealed that professional course instructors in teacher education at the University of New Hampshire received an average rating from students of 4.55 on a 5 point scale (5 being the highest rating). This course evaluation is done for all instructors at the University. The professional course instruction in Education as a whole ranked on a par with the best teaching at the University as perceived by students.

Phase Three: Internship and Graduate Studies

The final phase of the preservice teacher education program consists of a year-long, post-baccalaureate internship as well as

graduate study related to one's chosen area or level of teaching. Students usually spend one full academic year plus one or two summers completing Phase Three.

Internship

The year-long internship is the centerpiece of the Five Year Program. The Internship provides the principal instruction in "Teaching Methods." A full year of closely supervised internship offers the opportunity to integrate methods instruction with actual classroom experience. This format for instruction in methodology represents a firm and central commitment of the Five Year Program. During the internship, methods instruction is the focus of the regular review of interns' lessons and their curricular plans by cooperating teachers and university supervisors. Methodology is the usual emphasis of bi-weekly supervisory conferences following observation of one or more class periods of teaching. At least one of these conferences is combined with analysis of a video tape of the intern's teaching.

Methodology is also the focus of some of the weekly intern seminars. These seminars, usually consisting of a university supervisor and six interns, discuss common concerns, share successes and suggest procedures for dealing with individual problems. Seminars are occasionally combined together for large group meetings. An initial large group meeting includes cooperating teachers. A later group meeting focuses on development of resumes to be used in an Intern Yearbook, and on other matters relative to job seeking.

The success of the internship experience is closely tied to site selection. Placement is the result of a personalized process that begins in Semester One of the senior year. The Director of Field Experiences meets with each prospective intern and discusses placement possibilities, taking into account the intern's strengths, weaknesses, needs and preferences. Several students will usually visit a particular intern site and placement decisions are much like hiring decisions. A successful placement requires mutual acceptance and concludes with a meeting of intern and cooperating teacher. A preliminary working agreement is then discussed. The school principal and university Director of Field Experiences often attend at this meeting.

Second in importance to an appropriate intern site is the intense nature of university support and instruction provided to interns. Supervision in the University of New Hampshire Five Year Program has evolved to a point which far exceeds the conventional model of autonomous university supervisors who make one to three visits during student teaching. Five Year Program supervisors have relatively small teaching loads. Supervision of five or six interns is the equivalent of a one course teaching assignment. Supervisors are required to visit each intern a minimum of 12 times. The norm is a bi-weekly visit.

Supervisors meet weekly as a faculty subgroup. During these meetings, individual intern and common supervisory problems are discussed. Plans are coordinated for the weekly intern seminars, and large group meetings or group activities are developed. These meetings are chaired by the Director of Field Experiences.

The Graduate Concentration

The graduate program requires a 12-credit concentration and electives from a variety of University programs. Concentrations are offered in many areas of study. Preservice secondary teachers often choose concentrations in their major field. A number of university departments are giving attention to selection of specific graduate courses most appropriate for each prospective teacher. Students pursuing concentrations in their subject area usually elect the Master of Arts in Teaching Degree, although a few work toward a Master's degree in the subject field of study.

Several concentrations are available in the seven graduate programs of the Department of Education. The most popular concentrations are in Reading/Writing, Special Education, and Early Childhood Education. Students choosing these concentrations work toward a Master's Degree in Education.

A minimum of 30 credit hours of graduate work plus a final project or thesis are required for the Master's Degree. A typical program includes the 12 credit internship, a 12 credit graduate specialization, 6 credits of electives and a project. Students may obtain teacher certification before completing all requirements for the Master's Degree. About half complete the Master's degree and certification requirements before entering teaching.

Standards and Admissions Procedures

There is open admission to Phase One, "Exploring Teaching." Initial screening is done at the end of Phase One with school personnel,

University instructors and students each having a vote on the student's continuation to Phase Two. Students doing poorly in "Exploring Teaching", based on the judgment of instructors and cooperating teachers, are counseled to seek alternative career plans. This counseling is usually persuasive. If it is not and the student wishes to go on, he or she may be granted a second Exploring Teaching opportunity or may be dismissed from the program. The attrition rate after Phase One is approximately 40 percent.

Once in Phase Two, juniors, seniors or graduate students may choose from the four professional course areas. In consultation with an advisor, students may choose the course sequence and timetable that best fits their needs and interests. The typical student completes half of the required professional coursework as an undergraduate and half at the graduate level.

The second screening process takes place in the year prior to internship (early in the senior year). Considerable evidence is taken into account. The student must apply to the Graduate School and take the Graduate Record Examination. A teacher education committee then examines transcripts, grade point average, GRE scores, recommendations, and evidence from education department instructors plus the folder of papers and recommendations from "Exploring Teaching".

The minimum for a regular graduate school admission recommendation consists of the following:

(1) GPA - 2.75 (on a 4.0 scale)

(2) GRE - Sum of raw scores on the verbal and quantitative measures to be 900 or above

(3) Three strongly supportive letters of recommendation

(4) An undergraduate preparation appropriate for the intended area of certification

(5) A positive recommendation from the Exploring Teaching experience

The importance of direct evidence of teaching potential is clear from the following excerpt of the Teacher Education Admissions Policy:

> The Teacher Education faculty at the University of New Hampshire believes that direct evidence of teaching potential and evidence of appropriate interpersonal skills for successful teaching are essential criteria for admission to the final stages of the UNH Teacher Education Programs. Teaching potential is normally apparent by performance in Education 500. Thus, the Education 500 recommendations by the cooperating teachers in the school and by University faculty are considered seriously in all admissions decisions. We also believe that successful teachers must be able to communicate effectively with children and adults, have good listening skills, be sensitive to the needs of others, and be able to deal positively with children and adults. This collection of interpersonal skills is taken into account in admissions decisions. Evidence of this is gathered from Education 500, from contacts of University faculty with students, and from letters of recommendation required for admission to the five year program.

The average academic record of admitted students has been quite consistent over the past ten years. This information is repeatedly made known to students and most who are not close to this average do not apply.

PART IV - THE STUDENTS

Enrollments

Switching from a four year teacher education program to a five year teacher education program requiring admission to Graduate School

undoubtedly effects enrollment. In 1973 we predicted a 50% drop in enrollment. This is approximately what did occur. Of course, many unanticipated factors have influenced the number of students seeking careers in teaching over the past ten years, so it is difficult to ascertain the impact of the move to the Five Year Program.

One interesting comparison is to look at the change in numbers of five year graduates compared to the number of four year teacher education graduates at the University of New Hampshire. Four year options have existed in the following areas: music, home economics, occupational education, and physical education. Enrollment trends are seen in Figure 1.

A clear and surprising trend is the steady increase in numbers of five year graduates during a period of national decline in teacher education program enrollments generally. Until 1983, this trend proceeded without benefit of any direct recruitment efforts. The trend seems to be attributable in part to the strong appeal of a program with unusually high standards and a reputation for high quality instruction.

Recruitment

We have recently begun more active recruitment procedures. Over the past year, a number of efforts have been initiated. They include the following.

(1) The Excellence in Teaching Scholarship Program

This involves a major effort to raise private funds to endow four and five year scholarships of $2,000 per year for outstanding

high school students who wish to pursue a career in teaching. Seniors nominated by their school principals must meet the following criteria:

-- a strong academic record which places them in the upper quarter of students admitted to the University of New Hampshire
-- evidence of strong social commitment and interest in teaching
-- evidence of interpersonal skills appropriate for successful teaching, especially the ability to deal positively with others and communicate effectively

The fund raising has just begun and sufficient money is already available to continuously fund one Excellence in Teaching Scholarship. Our goal is to fund ten new scholars each year.

(2) Positive Media Attention for the Program

An effort has successfully been made over the past year to promote positive news and radio releases on the teacher education effort at the University. Some favorable national media attention has augmented this effort.

(3) Urging University Faculty to Recruit Good Students for Teaching

A letter was sent to all university faculty describing the current national problem with regard to supply of good teachers. Faculty were urged to help in promoting teaching as a positive career option.

(4) Direct Contact with Academically Talented High School Students

In 1984, a member of the teacher education faculty, using 11 interns from teacher education is conducting a year-long program for

115 of the state's gifted high school students. One discussion topic focuses directly on education in the future and the need for good teachers.

(5) Contact with High School Guidance Counselors

Meetings at the University and in the state's high schools have been arranged plus brochures are being developed describing options available for teacher preparation.

(6) Workshops with Elementary and Secondary Teachers and Administrators

Meetings with the state's teachers and administrators are being arranged to emphasize the importance of recruiting our best high school students for teaching.

It is too early to evaluate the impact of these measures, but we are encouraged by a dramatic increase in enrollment in the introductory course in teacher education (Exploring Teaching). (See Figure 2.)

Academic Characteristics

The academic characteristics of students in the five year program is one of the strongest indications of program success.

Students admitted to the final phase of the program over the past ten years have maintained an undergraduate grade point average of about 3.1 on a 4.0 scale. There has been little year to year variation. (See Figure 3.) This compares to a University grade point average of approximately 2.8 for graduating seniors (a 2.0 is required for graduation), and a Graduate School admissions grade point average of 3.1 for all graduate programs of the University.

During the past seven year period the Graduate Record Examination scores of all students admitted to Phase Three of the Five Year Program have averaged 516 on the verbal aptitude test and 523 on the quantitative aptitude test. Combined verbal and quantitative scores averaged 1042. Scores on the GRE are higher for the past two years than ever before. (See Figure 3.) Approximately 40% of those admitted to the five year programs have been honor students as undergraduates.

The academic quality of students attracted to the Five Year Program is illustrated by examining the profile of the top 40% of the students admitted during 1983 and 1984. Forty-seven students in this sample had an average grade point of 3.38. The average verbal score on the Graduate Record Examination is 591. The average quantitative score was 598. The combined average was 1189. Twenty-four members of this group graduate cum laude. Eleven graduate magna cum laude. Four graduated summa cum laude. Seven were elected to Phi Beta Kappa. Eleven were elected to other national societies honoring academic achievement.

Clearly the academic characteristics of students in the UNH Five Year Teacher Education Program are outstanding. Not only do they represent a group academically far superior to prospective teachers described in national summaries, they also represent significantly better than average senior students at the University of New Hampshire and are comparable to all graduate students at that institution.

Non-Academic Characteristics

Students in the Five Year Teacher Education Program at UNH are significantly different academically from those described as representative of the national teacher talent pool. Do they differ in other ways as well? The evidence is less clear but there are some unusual facts which seem to indicate significant difference.

One is the high job securing rate of program graduates. Over 90% of five year program graduates have obtained jobs in their first year after program completion. This figure has remained consistent (85-93%) over the ten year history of the program. The record has held during a period of great oversupply of teachers. Two factors seem to explain this high job success rate. The first is superior qualifications for competition in the marketplace (a strong subject matter background and general education, outstanding academic credentials, extended internship experience).

The second is great commitment to a career in teaching. Students who select the Five Year Teacher Education Program at UNH have a strong desire to teach. They persist in spite of high academic standards, an additional year (or more) of higher education and ever escalating costs, plus the sometimes gloomy reports of job prospects, job status and poor pay.

To further clarify the reasons for choice of a teaching career with the UNH Five Year Program, a study was conducted in 1982 to analyze factors cited by students as influencing their choice for and against a career in teaching. The data source was a self-analysis paper required

of all students in the initial program course, Exploring Teaching (Phase One). In this paper students are asked to consider their personal values, goals and attributes and their recent semester of experience in teaching, and to evaluate the possibility of teaching as a career. For the study of career decisions a stratified random sample was taken over a five year period (Fall 1976 through Spring 1981); 248 papers were chosen. This represented 20% of the total. Subgroups were identified. Twenty percent of each group was sampled.

Two readers plus the author read a small sample of papers and identified a list of factors cited by students as influencing them to choose a career in teaching and a list of factors influencing them against a career in teaching. The list was adjusted after a preliminary sample was completed by the two readers (graduate students in education). Only the data agreed upon by both raters were used.

Several interesting generalizations can be drawn from the analysis of data. First, the most important factor for those who chose to go on in the Five Year Program (N = 86) is the social service motivation: Helping--Human Growth. This is discussed by students in terms of wanting to make a contribution in an area of social need they consider of great importance. This factor is most frequently listed by both men and women. Enjoyment of Children is the second most frequent factor cited in support of a teaching career by those choosing to continue in the Five Year Program (32.5%). However, this rating is nearly entirely the result of women's priorities. Only 4.5% of the men chose this factor and it rated a distant sixth in the men's summary. Third Love of Subject is the

third most important factor in favor of a teaching career for those who chose to go on in the Five Year Program. This was of equal significance to men and women. Fourth, students who go on in the teacher education program mention very few negative factors in making their tentative career choice. The most predominant negative factor (Salary) was listed by only 4.7% of the sample.

Other factors often listed to explain the decline in availability of good teachers received the following emphasis: tight job market (1.2%), lack of job security (0.0%), few promotion possibilities (0.0%), restricted education budgets (0.0%), advice from others against teaching (0.0%). The extreme priority given to the social service motivation by the academically talented students and the disregard of negative factors by students choosing to teach demonstrate that we are dealing with more than a supply-demand or wage-talent situation in attracting good people into teaching.

While the issue of retention demands that we attend to the negative factors surrounding the job of teaching, the recruitment of good teachers demands that we emphasize the positive aspects. Our research and repeated conversations with students in the Exploring Teaching course emphasizes that students choose to enter teaching because they want to make an important social contribution. They value the educational growth of children. They love working with young people. They love their subject field. They are good at teaching, and they like the life style and work schedule. We can recruit good teachers by emphasizing these aspects of the job.

PART V - A NATIONAL PLAN FOR RESTRUCTURING TEACHER EDUCATION

Ten years' experience with an extended teacher education program at a state university provides evidence for a plan to effectively restructure teacher education. The most important conclusion is that teacher educators can improve both the talent pool for teaching and the quality of preparation by appropriately restructuring their programs. Restructuring needs to emphasize the following five factors.

The Basics for Change

(1) Strong subject field preparation and few professional requirements at the undergraduate level.

(2) High academic standards for entry into teacher education.

(3) Choice from challenging, well taught, professional offerings.

(4) Classroom teaching experience early in the program.

(5) A well supervised, year-long internship.

Extending teacher education programs beyond four years coupled with more stringent academic and performance standards will undoubtedly reduce the number of teachers prepared at most institutions. This will have two beneficial results. One, it will reduce the number of teachers of low academic ability. Two, it will provide a higher percentage of teacher education students who actually take a teaching job. While we have no complete follow-up data suggesting how long these people stay in teaching, we do know that requirement of an extra year to become a teacher has significantly increased the number of program graduates who actually enter teaching. (Or, to put it differently, it has significantly reduced the number of graduates who don't enter teaching.)

This approach to restructuring teacher education will also produce a problem. It will lower the supply of teachers. The reduction will not be as great as might be expected if three new efforts are concurrently made. One is the active recruitment of good students for teaching. The second is to provide student financial support for the extended program. The third is to insure that work in the extended program counts toward a Master's degree.

Teacher educators have not yet tested the effectiveness of recruitment to any appreciable degree. Our experience and research indicates that there are many excellent students with the necessary qualifications for becoming good teachers who can be enlisted for at least a few years of service to teaching. These are students who have a strong desire for social service and who place a high value on education. We believe they can be best recruited by appealing to their sense of service and by providing challenging programs of high quality.

W. Timothy Weaver has provided an interesting analysis of the possible consequences of restructuring teacher education in a recent article.[6] He contends that the supply of good teachers is tied tightly to available wages. While his analysis is in most ways convincing, he fails to recognize the power of the social service motive and the love of teaching that attract people into teaching who could command far greater wages in another field.

The decade from 1974 to 1984 has been a time of pragmatism on college campuses and in much of our society. We have experienced little idealism and a dearth of support for social service.

A renewed support of the value of teaching from society and from our educational institutions can produce numbers of good teachers far in excess of those predicted by an analysis of economic factors.

A number of studies examining teacher retention have confirmed that the most academically talented students most often leave teaching after three to five years.[7,8] This fact has been evident at least since the height of the M.A.T. programs in the 1950s and 1960s. We know that it is normal for individuals to change careers several times in their lives. Teaching can be promoted as a good, first career as well as an opportunity for providing important social service.

Of course, we must not only promote teaching as a short term commitment, but it seems appropriate to openly recognize the fact that teaching can be a desirable short term, first career for many capable people.

While salary may not deter many good candidates from teaching, the added immediate financial burden of an extended teacher preparation program may. Financial support for the education of outstanding candidates for teaching must be made available if the restructuring advocated in this paper is to work in significantly improving the nation's teachers. We cannot realistically expect that large numbers of outstanding college students will be willing or able to pay for an extended teacher preparation program with the prospects of a relatively low salary in return. This has been obvious at the University of New Hampshire, sometimes painfully obvious. Good candidates often make decisions to choose the fifth year of our program because a paid

internship or scholarship is available. Many do not finish the program because no funds are available.

The lack of financial support for the extended program is the most serious problem for the Five Year Program at the University of New Hampshire. We are only preparing 60 to 70 teachers a year from this program. We estimate that we could prepare 150 equally competent teachers a year from the Five Year Program if appropriate financial support were available. The investment of $5,000-$10,000 is enough to tip the balance for a significant number of students. This is surely a small investment for the teaching services of the top half of our academic talent pool, even if those services are for only a few years.

State and Federal government, business, industry, private foundations and concerned individuals must join together with colleges and universities to provide financial support for the education of outstanding prospective teachers. Without such support, we will not be able to significantly improve the quality of the nation's teachers.

The availability of graduate programs for the extended preparation is an added incentive to weigh against the expense and time for the extended program and teaching salary reality. The graduate degree offers prestige as well as a substantial increase in pay in most school systems. Having a graduate degree as part of an extended program is not essential, but without it other incentives must exist.

The enrollment impact of proposed restructuring will be the greatest in institutions which draw from the middle and lower half of the college student population. If admission to teacher education requires that

students represent the top half of the national student talent pool, then many of these institutions would be forced out of the teacher education business. Immediate problems of teacher supply as well as other political consequences of this action make such a recommendation impractical. A more realistic requirement is that any teacher education program draw its students from the top half of its institution's student pool. This will still significantly reduce the number of poorly qualified teachers prepared.

The proposed restructuring would also make teacher education difficult in small, private colleges. They would be particularly vulnerable both because a reduction in size of teacher education programs could bring programs to a less than efficient size and because those schools are usually unable to offer graduate programs. The opportunity to receive a Master's degree or work toward one is a major incentive for the student in an extended program.

Institutions with large teacher education programs could also expect a major impact on enrollments. This is a predictable result of the post baccalaureate requirement and academic requirements more stringent than many schools now have. However, schools already holding high standards for admission to teacher education will experience less impact. Dale D. Scannell reports preliminary evidence that the first group of graduates from the extended program at the University of Kansas will be about the same size as the last class to graduate from that institution's former four year program.[9]

Promoting Teacher Recruitment and Preparation at Our Best Colleges and Universities

To move to increase the number of good teachers in any substantial way, we must not only look at restructuring existing programs but also at the redistribution of some of our efforts to the more prestigious institutions. These schools need to be encouraged to institute well supported, attractive teacher preparation options. Variations of the model developed at the University of New Hampshire would be entirely appropriate for some of these institutions.

The smaller institutions in this group may not be able to mount a viable teacher preparation option. These schools could offer a program of exploratory classroom teaching and connect interested students with nearby schools having an extended teacher education program with a post-baccalaureate entry. Such an option is available at the University of New Hampshire. It parallels the M.A.T. program structure of the 1950s and 60s and currently serves about 15 students a year.

Appropriate Support from State and National Agencies

Restructuring of programs and redistribution of responsibilities can only work if supported by state and national educational agencies and teacher certification groups. These groups must come to realize the challenge of providing good teachers for the nation's schools requires positive recruitment and an emphasis on teacher education program redesign that will attract more students with the desired, and indeed necessary qualifications for teaching.

Certifying and accrediting agencies should ask that institutions preparing teachers represent accredited colleges and universities, and that they offer proof of a few basic requirements such as the following:

(1) that they are attracting the majority of their students from the top half of their institution's student population.

(2) that students are selected for teacher preparation programs based in part on observations of student performance in classrooms and that competent classroom teachers participate in selection decisions.

(3) that their students are receiving strong subject matter preparation in a major field and in areas of proposed teaching responsibility.

(4) that students are receiving a minimum of well structured professional course work that can be justified as important and relevant to the teacher's role in the classroom and the school. Inclusion of any required courses should be based on at least three questions. Do the courses involve content that is basic to good teaching and the teacher's role in the school? Is the content not adequately dealt with in other aspects of the program? Is it content that the preservice program can and should supply?

(5) that there are at least fifteen weeks of well supervised clinical experience to produce a competent beginning teacher and that good classroom teachers are involved in decisions attesting to competence.

(6) that at least 80% of program graduates initially take teaching jobs.

The last criterion is particularly important. It is a test of the desirability of the product. It is also a measure of the efficiency of use of teacher preparation resources. Too often our programs in teacher

education have been used as easy routes through college or as insurance policies against unemployment in some other field. We cannot justify the expense of high quality programs of teacher preparation if our graduates do not enter the field of education.

State and national agencies setting standards for teacher certification must stop the proliferation of specific requirements and more strongly enforce the basic ingredients for providing good teachers. Institutions not making sufficient effort to provide the basics should be encouraged to do so. Institutions not able or willing to provide the basics should not be accredited in teacher preparation. Institutions providing the basics should be praised for doing so.

If program restructuring, redistribution of responsibility and positive support by state and federal agencies can be combined with a successful national effort to improve the conditions of teaching, then we can meet our challenge of providing enough good teachers for the nation's classrooms.

Footnotes

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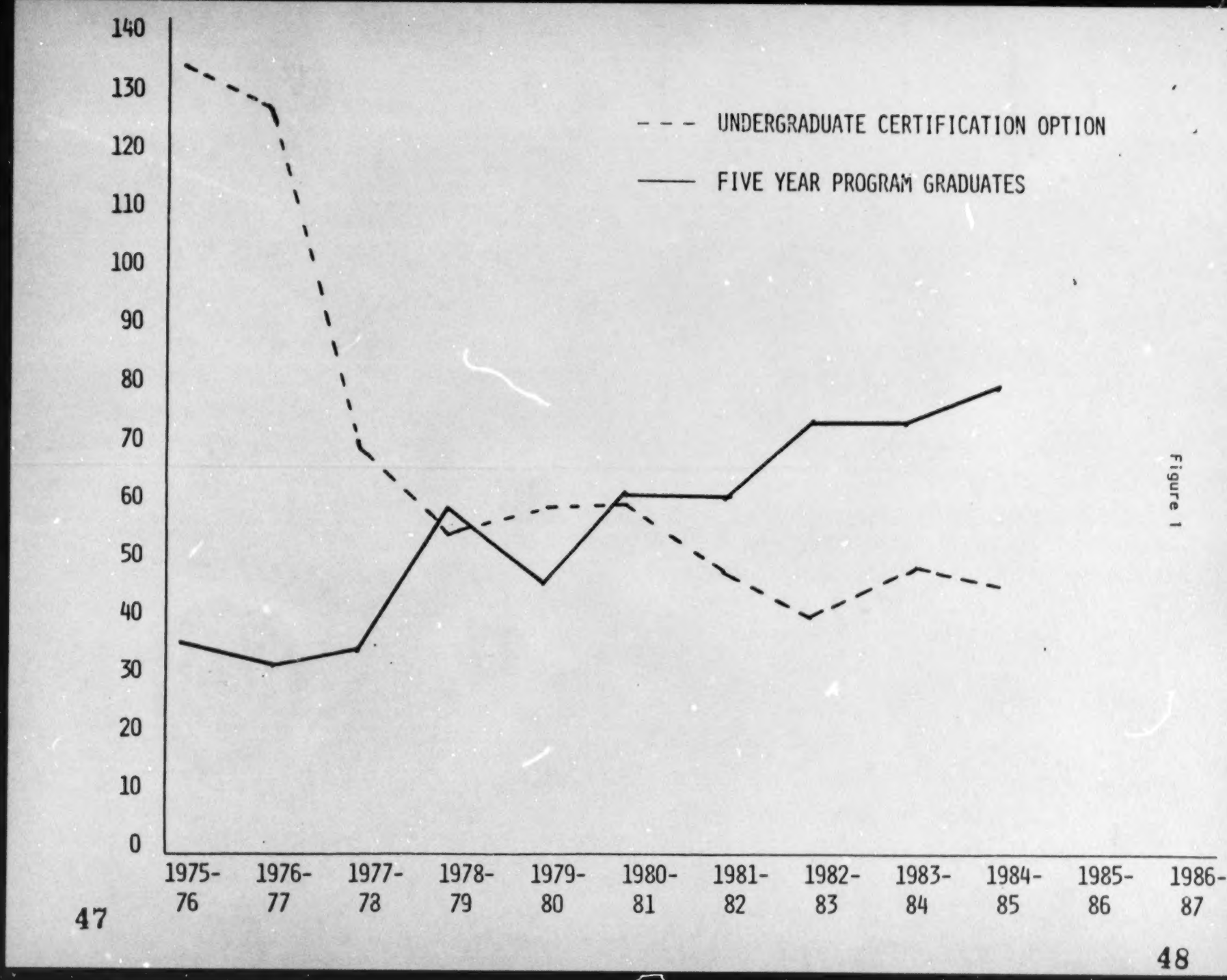
140
130
120
110
100
90
80
70
60
50
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30
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0
UNDERGRADUATE CERTIFICATION OPTION
FIVE YEAR PROGRAM GRADUATES
1975-76
1976-77
1977-78
1978-79
1979-80
1980-81
1981-82
1982-83
1983-84
1984-85
1985-86
1986-87

Figure 1

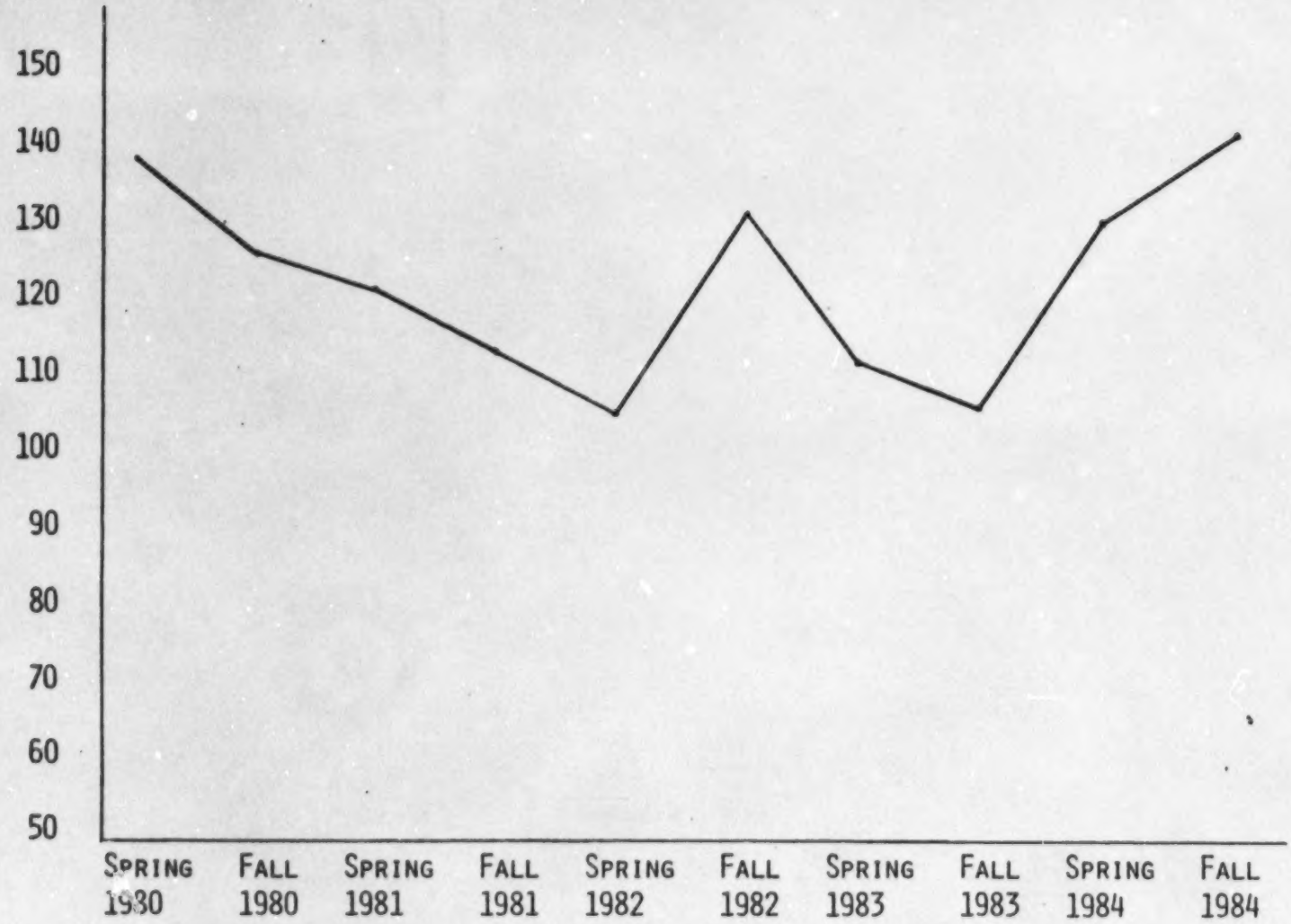

Figure 2

NUMBER OF STUDENTS ENROLLED IN EDUCATION 500
SPRING 1980-FALL 1984

ACADEMIC CHARACTERISTICS OF FIVE YEAR STUDENTS
UNH TEACHER EDUCATION PROGRAM

YEAR	NUMBER	GPA	GRE SCORE VERBAL	GRE SCORE QUANTITATIVE	COMBINED GRE
1978	69	2.99	511	523	1034
1979	55	3.01	518	515	1033
1980	45	3.02	531	509	1040
1981	57	3.01	493	513	1006
1982	37	3.05	501	530	1031
1983	57	3.05	530	551	1081
1984	65	3.05	527	522	1049
AVERAGE		3.03	516	523	1039

Figure 3